



## Digital Technology Literacy, And Digital Economy Literacy as an Effort to Improve Business Sustainability In Banten's Micro And Small Industries In The Era Of Business Uncertainty

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**Abstract.** *Digital technology is beneficial in running a business in production, marketing, and finance. However, not all business actors have used digital technology and the digital economy to help run their businesses, especially micro and small business actors. This study aims to investigate the role of digital technology literacy and the digital economy in encouraging the interest of micro and small business actors to use digital technology that will drive the sustainability of their businesses. The survey was conducted on 162 micro and small business actors in Banten province. This study uses the technology acceptance model (TAM) theoretical framework. In this research, data analysis using SEM-PLS. The study results show that digital technology and economic literacy significantly affect perceived Ease of use and usefulness. Digital technology literacy has an effect on business sustainability, but digital economic literacy has no effect. Perceived Ease of use and perceived usefulness significantly affect the intention to use. Intention to use has a significant effect on business sustainability. This research also strengthens the role of TAM as a mediating variable for business sustainability variables. This research provides scientific insights in the field of digital technology and business sustainability, as well as provides practical insights for business actors and the government.*

**Keywords** *literacy, digital technology, digital economy, business sustainability, micro and small business.*

### INTRODUCTION

Today's business progress must be connected to the development of digital technology. Digital technology helps improve a business's performance, starting from creating value, communicating value, and delivering value to satisfy customer needs and desires (Ancillai et al., 2023). The rapid development of digital technology has given rise to various business opportunities (Çipi et al., 2023) and also a tool to enable business organizations to increase competitiveness (Marti & Puertas, 2023). Business opportunities from the development of digital technology are very diverse and at various levels. One of the most prominent is the emergence of digital business platforms such as e-commerce in the form of online stores (Huseynov & Özkan Yildirim, 2019), websites (Wu et al., 2021) and social media (Lin & Wang, 2023). In addition to the emergence of various business platforms, various digital products are also offered to the market, such as online games, video games, and software (Vaudour & Heinze, 2020). In addition to

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creating business opportunities, digital technology can help companies provide services faster and more agile and deliver value (Hadjielias et al., 2022). Adopting digital technology can also help companies set cheaper prices (Shashi, 2023). The application of digital technology can also help companies provide services and payments (Modgil et al., 2022; Widayani et al., 2022).

However, not all business people can easily take advantage of the development of digital technology. Micro and small businesses need help adopting digital technology (Diana, 2022). In Indonesia, obstacles to adopting digital technology arise from two sides: the business owner's side, namely, the older the owner, the less likely they are to adopt digital technology, and the higher education of business owners. Meanwhile, companies with low competition and high direct sales are less likely to adopt digital technology (Trinugroho et al., 2021). Micro and small businesses face other obstacles in adopting digital technology, such as resources, marketing, competition, and capital (Martini et al., 2023). Micro and small businesses are also faced with the obstacles of lack of financing, knowledge of managers on digital technology, and insufficient employee expertise in using digital technology (Basit et al., 2024; Rupeika-Apoga & Petrovska, 2022). Thus, the problem faced by micro and small business actors is still low digital literacy, which includes knowledge of digital technology, willingness to learn about digital technology, trying to continue learning about digital technology, and expertise in digital technology (Nikou et al., 2022). Currently, micro and small business actors are not only faced with a low level of digital literacy, but their understanding of the digital economy is also low, for example, their understanding of digital marketing still needs to be improved (Diana, 2022). In addition, the difficulty of micro and minor actors in Indonesia is due to low digital financial literacy. Many needs help understanding digital transactions and fintech applications (Devi et al., 2023). One of the factors inhibiting the low literacy of digital technology, digital economy, and digital finance is the low level of education of micro and small business owners. With low education, micro and small business actors need help to utilize information technology to support their business development (Suyanto et al., 2023). BPS data in 2020 shows that most micro and small business owners (75.51%) in Indonesia have a junior high school education, and only 21.04% have a high school education. The study results show that the level of education affects the level of digital literacy. The higher the level of education, the higher the level of digital literacy and the

more ready to adopt digital technology (Anatan & Nur, 2023; Zahoor et al., 2023). Only now is the level of digital literacy of micro and small business actors in Indonesia still very low.

Meanwhile, of the 103,828 IMK companies in Banten Province in 2021, as many as 90.31 percent or 93,763 businesses experienced difficulties carrying out their business processes. The most significant difficulty faced by IMK companies is the capital difficulties of 72,128 businesses. The second difficulty faced by IMK businesses in Banten is the difficulty of marketing a total of 44,301 businesses. The next difficulty that many people experience is also the difficulty of raw materials for 34,112 companies (1). From the many IMK businesses that are experiencing difficulties, it can be seen that product marketing for micro and small businesses in Banten Province as much as 96.24 percent of companies are still marketing in one district/city. 16.29 percent do market outside the district/city but still within one province, 3.97 percent are marketed outside the province and only 0.04 percent market their products abroad. This happens due to the lack of technology adoption in marketing its products.

From the above problems, it is very important to measure the level of digital technology literacy, digital economic literacy, and digital financial literacy to produce a model for increasing the literacy of micro and small business actors in order to be able to improve business performance and business sustainability. As is known, the application of digital technology, digital economy and digital finance plays a very important role in improving the business performance of micro and small business actors (Rvspk et al., 2020; Sariwulan et al., 2020). In this study, we will also want to know the digital technology gap in micro and small business actors in Banten province. In addition, by using the technology acceptance model (TAM), it is wanted to know how much benefits of using digital technology are felt by micro and small business actors. As research that produces a model, this study will examine the relationship between variables, namely how the relationship between digital technology literacy, with the technology acceptance model and business sustainability, the relationship between digital economic literacy and the technology acceptance model and business sustainability.

The novelty of this study is the production of a micro and small business development model in Banten Province based on the results of measuring the level of

digital technology literacy, digital economy and digital finance, which is moderated by the technology acceptance model (TAM) which will be an important factor in maintaining the continuity of micro and small businesses. Of course, the expected impact of the increase in the performance of micro and small businesses shown by business continuity is the increase in the economic performance of Banten province.

The results of this research will greatly help the Banten provincial government in designing programs to increase digital literacy, digital economy and digital finance as the government's efforts to help micro and small businesses develop and be sustainable. Based on the results of this study, the Banten provincial government can determine a priority scale in supporting the level of digital technology literacy, digital economy and digital finance, so that micro and small business actors are able to improve their business performance, especially in terms of increasing sales revenue.

## **LITERATURE REVIEW**

### **Literasi teknologi digital, Perceived of Easy, and Perceived of Usefulness**

The term digital literacy is the most widely used and has diverse perspectives (Pangrazio et al., 2020). There is a perspective that states that digital literacy is related to the ability to use digital technology devices such as computers, cellphones and other devices for life and work activities, which are grouped into digital dexterity, digital proficiency, and digital awareness (Grefen, 2021). Digital literacy is a combination of procedural technical skills, cognitive abilities, and social-emotional skills (Reddy et al., 2023). Digital literacy is the skill to adopt digital technology (Ollerenshaw et al., 2021). Another view of digital literacy is related to the level of interaction between people or society with digital technology used to create information (Tinmaz et al., 2022). Furthermore, Tinmaz (2022) reviewed various articles about digital literacy and found that the derivatives of digital literacy are computer literacy, software and hardware literacy, cultural literacy, computer program literacy, technical gadget literacy, affective and psychomotor skills to work using digital devices, and creating and applying digital literacy in real life. From some of these views, it can be stated that what is meant by

digital literacy includes the ability to use digital technology devices, both hardware and software. Therefore, in this study to distinguish it from the term digital economy (which is part of digital literacy), we will use the term digital literacy, as digital technology literacy. The adoption of digital technology by micro and small businesses is greatly influenced by digital technology literacy and digital technology acceptance model (B. Setiawan et al., 2023).

The technology acceptance model (TAM) is a simplification of a person's perception of the Ease of using technology, the usefulness of technology and the desire to use technology that allows a person to adopt technology, including digital technology (Davis et al., 1989; Davis Fred, 1985; Shavazipour et al., 2021). With TAM we can understand why someone might reject technology, predict possible uses of technology and when it can be adapted (Kamal et al., 2020). There are two important factors that reveal that a person intends to use technology, namely perceived Ease of use and perceived of usefulness. Perceived Ease of use is the Ease that a person feels in using technology (Root, 2019). In terms of digital technology, perceived easy of use means that a person feels easy in using it before that person uses it (Barbosa Neves et al., 2019). Perceived of usefulness is related to how a person feels that the technology, in this case digital technology, is useful in supporting their life and work activities, including in supporting business activities (Martzoukou et al., 2020).

Digital literacy with the dimensions of information and data literacy, communication and collaboration, digital content creation, security, and problem solving have a positive effect on readiness to accept technology (Cetindamar et al., 2024). The findings of Guner and Acartuk (2020) show that external variables of the technology acceptance model, such as the availability of technology facilities, have a positive effect on the Ease of using digital technology for both adults and adolescents. Meanwhile, social interaction has a positive effect on the Ease of acceptance of digital technology for adults (Guner & Acarturk, 2020). The results of other studies on digital literacy measured by three dimensions, namely technical, cognitive, and social-emotional, show a significant influence on perceived Ease of use, and perceived of usefulness (Nikou et al., 2022; Ullah et al., 2022). In the use of computer technology, a person who already feels that he is able

to use a computer has a positive effect on perceived of easy and perceived of usefulness (Almulla, 2021).

H1 : Digital Technology Literacy (DTL) has a significant effect on perceived Ease of use (PEOU)

H2 : Digital technology literacy (DTL) influences perceived of usefulness (POU)

### **Digital Economy Literacy, Perceived of Easy, Perceived of Usefulness, and Intention to Use**

The digital economy has diverse perspectives. The first perspective views that the digital economy is the use of network technology, integrating communication and computing technology in the internet network, developing the web, e-business, and delivering goods and services through the internet. This view leads to how the use of digital technology as a tool to improve business performance through business transformation (Chouhan & Rathore, 2018; Daoud, 2000; Lauscher, 2019; Mahmud, 2017; Salem & Parusheva, 2018; Schön, 2019). This view is more micro, namely, how to see the digital economy for business practice activities. The second view is to see the digital economy as an aggregate of the production, marketing and delivery of goods and services using digital technology and the internet (Abhyankar & Ganapathy, 2014; Báez & Brauner, 2018; Patterson, 2018; Peter Heng et al., 2010; J.-H. Yang, 1978). In this study, the concept of digital economy will refer to the first perspective, namely how to use digital technology in business activities using the concept of digital marketing, electronic commerce, electronic transactions, digital finance and service processes using digital technology to help business activities. In this study, digital economic literacy will use a digital financial approach as a proxy.

Digital financial literacy is known to have an effect on technology adoption, especially from the aspect of experiencing the usefulness of digital financial technology (Ullah et al., 2022). Research on micro and small businesses in Indonesia shows that digital financial literacy or also often referred to as financial literacy does not have a significant direct effect, but has an indirect effect through the level of user innovativeness (Thatsarani & Jianguo, 2022). Other research on micro and small businesses in

Indonesia shows that financial literacy has a significant effect on the adoption of digital finance through financial accessibility (Thathsarani & Jianguo, 2022). Still research in Indonesia, financial literacy has a direct effect on technology adoption and has an indirect effect on technology adoption through the level of user innovation (B. Setiawan et al., 2021). Other research shows that financial literacy has an effect on the intention to use digital financial technology (B. Setiawan et al., 2023).

- H3 : Digital economic literacy (DEL) has a significant effect on perceived Ease of use (PEOU)
- H4 : Digital economic literacy (DEL) has a significant effect on perceived of usefulness (POU)
- H5 : Perceived easy of use (PEOU) has a significant effect on intention to use
- H6 : perceived of usefulness (POU) has a significant effect on intention to use

### **Digital Technology Literacy and Business Sustainability**

Business sustainability is the Company's ability to grow and develop in three aspects, namely economic, social and environmental (Fernando et al., 2019). Economic sustainability is the Company's ability to continue to grow and develop in terms of revenue, increasing profits and the provision of jobs (Tien et al., 2020). The company's social sustainability is how a business is able to meet the needs of the family, empower the surrounding community, be able to absorb labor, and get recognition from the community (Iazzolino et al., 2022). Environmental sustainability is how the Company is able to continue to protect the environment, for example producing as little waste and waste as possible, being able to manage waste properly and always obeying government regulations, especially regulations regarding the environment (Machado et al., 2020). The determinants of business sustainability consist of many factors, including digital literacy (Omiunu, 2019), marketing literacy (Gao et al., 2023) and literacy (Kulathunga et al., 2020; Singla & Mallik, 2021). Digital technology literacy is an important factor needed in improving business sustainability (Dana et al., 2022). Some of the key performance indicators used to measure digital technology literacy are the ability to find, process, produce, and communicate information. In addition, it is necessary to have skills in online technology, communication norms and environmental programming (Radovanović et al., 2020). Research on digital literacy measured by two idifiers, namely awareness and

competence, shows a significant influence on business sustainability growth (Pandey et al., 2022). The application of digital technology in business practices is able to guide the Company in achieving business sustainability (Xu et al., 2023). The application of digital technology is related to digital orientation, namely the level of digitalization of business activists. Higher digital onboarding means more business activities are digitized (Nasiri et al., 2022). Digital orientation affects the sustainability of innovation (Khin& Ho, 2019) such as product innovation, process innovation, service innovation, and marketing innovation (Bustinza et al., 2019). The ability to carry out sustainable innovation improves business sustainability (Hanaysha et al., 2022). Thus, indirectly, technological literacy is related to business sustainability.

H7 : Digital Technology Literacy (DTL) has a significant effect on business sustainability

### **Digital Economy Literacy and Business Sustainability**

It is undeniable that digital marketing is very useful in developing businesses, especially for large companies. The huge digital advertising expenditure is a clear example that digital marketing is very important in improving business performance (Ritz et al., 2019). Therefore, it is very important for business people to understand and master digital marketing so that it can be used to improve business performance (Peter & Dalla Vecchia, 2021). A study on e-commerce in micro and small companies in Indonesia shows that e-commerce adoption plays a role in improving business sustainability (Yacob et al., 2021). The use of digital financial technology is now inevitable. Financial technology (FinTech) has now become one of the drivers of sustainable business through four main pillars, namely the first importance of having a digital account, the second is a digital payment system, the third is digital infrastructure and the fourth is the design of the digital financial system market (Arner et al., 2020). Research on small businesses in Nigeria categorized as developing countries shows that financial literacy and practical financial capabilities are able to improve the sustainability of small businesses (Babajide et al., 2023). Research in Ghana shows that financial literacy can improve the performance of small and medium-sized businesses. The use of digital platforms will greatly help small and medium-sized businesses improve their performance (Frimpong et al., 2022). Another study in Ghana found that small business managers who had good



financial literacy influenced business performance from both financial and non-financial aspects (Tuffour et al., 2022). Research on business actors in Saudi Arabia found that financial literacy through awareness of financial products, understanding financial institutions, financial planning and money management is able to encourage the sustainability of business performance (Seraj et al., 2022). At the practical level, the application of digital finance carried out by business people is able to improve business performance, both financial and non-financial. Micro and small companies that are in a tight market competition and are a high-tech industry will benefit from implementing financial technology (Thatsarani & Jianguo, 2022). Digital finance is able to improve the performance of micro and small businesses if they are given Ease of access to funding sources and eliminate obstacles faced by companies (L. Yang & Zhang, 2020).

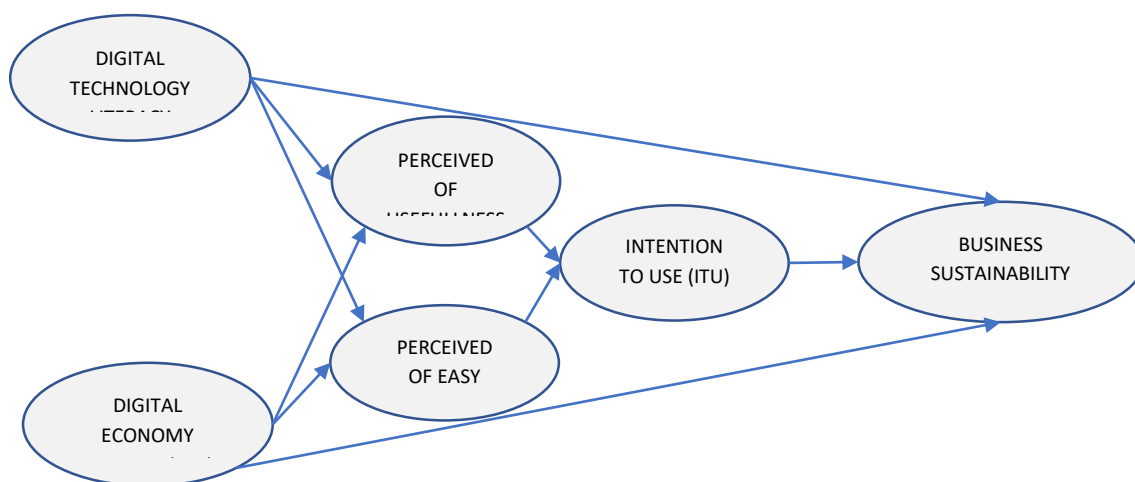
H8 : Digital economic literacy has a significant effect on business sustainability

### **TAM and Business Sustainability**

The technology acceptance model (TAM) developed by Davis (1985) shows that the adoption rate of an information technology is influenced by the public's perception of the Ease of use, the feeling of usefulness, and the intention to use (Davis Fred, 1985). The model was then developed by Davis et al. (1989) which has received very strong recognition and confirmation from the public and has become a reliable model to explain the spread of various types of technology. The three main components in TAM are Ease of use, usability of technology and intention to use it into a simple but sturdy model. These three aspects are antecedents in the adoption of innovation in various industries, including micro and small industries. In various studies, it was found that perceived Ease of use and perceived of usefulness have a significant effect on the intention to use of digital technology (Ma et al., 2017; Patma et al., 2021; Rodríguez-Espíndola et al., 2022; Salam et al., 2021; Yuen et al., 2021). In the TAM model that has been developed, in the technology acceptance model, the actual use of technology variables are added. This means that by using TAM, starting from the acceptance of technology to the actual use of technology, it has been explained as a unit (Davis et al., 1989; Loo et al., 2023). The actual adoption or use of digital technology has an impact on business sustainability both from economic, social and environmental aspects (Hanaysha et al., 2022; Rana et al.,

2018). In small businesses, the adoption of innovation should be carried out in stages, starting from digital payments, especially mobile money to be able to increase business sustainability, production and consumption (Bai et al., 2021). Other research on small and medium-sized businesses found that the use of digital technology in the form of mobile applications is able to succeed in business processes, and is able to increase efficiency in the long term (Rakshit et al., 2021).

H9 : Intention to use has a significant effect on business sustainability



**Figure 1: research model**

## **METHODS**

### **Participants**

This research is categorized as quantitative research that intends to test several hypotheses. The design of this study is a cross-section study, which is to collect primary data from the respondents in a certain time. The respondents in this study are micro and small business actors in the Banten province area. Data collection uses a questionnaire and is disseminated through google forms to micro and small business actors through the WA group. The number of respondents was 160 spread across eight districts/cities in Banten Province. The sample size meets the required sample size by referring to the formula from Hair et al. (2018) where the number of samples follows a ratio of 15:1 or 20:1(Hair et al., 2020). This means that each variable requires 15 to 20 samples. In this study, the number of variables is 6 variables, so the minimum number of respondents is  $6 \times 20 = 120$  respondents. Thus the number of samples of 160 has exceeded the minimum

number of samples. The sampling technique used is purposive sampling, which is to select the respondents who are most likely to produce the most appropriate and useful information (Campbell et al., 2020).

### **Measurement**

Each variable uses a measuring tool in the form of a questionnaire. The questionnaire is designed according to the construction of each variable. In this study, the research variables are grouped as exogen variables and endogenous variables. The exogen variable consists of two variables, namely digital technology literacy and digital economic literacy. Meanwhile, endogenous variables consist of perceived Ease of use, perceived of usefulness, intention to use and business continuity. Digital technology literacy is the ability and expertise to use digital technology equipment to discover, create, evaluate and share information (Judson, 2010; Nikou et al., 2022). This variable was measured using four indicators: (1) Knowledge of digital technology, (2) willingness to learn digital technology, (3) Always learning new things, (4) Digital technology expertise. Digital Economy Literacy is how the use of digital technology in business activities uses the concept of digital marketing, electronic commerce, electronic transactions, digital finance and service processes using digital technology to help in business activities (Nikou et al., 2022)(Daoud, 2000)(Williams, 2021). Digital financial literacy is measured using three indicators, namely (1) Having an understanding of electronic payments, (2) Having an understanding of digital financial products, (3) Experience in using financial technology (ovo, dana, gopay, etc.) (M. Setiawan et al., 2022). Perceived Ease of use means that a person feels easy in using it before that person uses it (Barbosa Neves et al., 2019). Perceived Ease of use is measured using three indicators, namely (1) easy to use social media for marketing activities, (2) easy to create marketing content, (3) easy to advertise on social media and the internet. Perceived of usefulness is related to how a person feels that the technology, in this case digital technology, is useful in supporting their life and work activities, including in supporting business activities (Martzoukou et al., 2020; Yuen et al., 2021). Perceived of usefulness is measured using three indicators, namely (1) social media is important for marketing activities, (2) marketing content can increase consumer buying interest, (3) advertising on social media and the internet is very important to increase sales. Intention to use is the intention of a person to take action

using digital technology and the digital economy (Almulla, 2021; Ullah et al., 2022). Intention to use is measured using three indicators, namely (1) intend to use social media as a means of business, (2) in the near future will use content marketing in online marketing, (3) will soon make advertisements on social media and the internet. Business sustainability is the Company's ability to grow and develop in three aspects, namely economic, social and environmental (Fernando et al., 2019). Business sustainability is measured using three environmental indicators (less waste, waste managed, following government regulations), three economic indicators (providing jobs, increased sales, increased profits, expected profits), two social indicators (meeting family needs, community recognition).

All variables were measured using a differential semantic scale of 1-7, where the number 1 means strongly disagree and the number 7 means strongly agree with the proposed statement.

### **Analysis Methods**

The data analysis methods used are descriptive statistics and structural equation model (SEM) based on partial least square (PLS). The software used in SMART-PLS. This SEM-PLS method is useful for analyzing the accuracy of measuring instruments (validity and reliability) which is referred to as the outer model test. To ensure that the resulting SEM model is suitable or not, an inner model test will be carried out. The resulting structure will show how strongly the relationship between one variable and another variable. Furthermore, the research hypothesis that has been proposed is tested by comparing the P value with an alpha error rate of 5%.

## **RESULTS**

### **Respondents and descriptive statistics**

The data that was successfully collected was 161 micro and small entrepreneur respondents, dominated by women entrepreneurs (92%). The majority of respondents were between the ages of 20-40 years old (73.5%) with the majority having a junior high and high school education (75.9%). The majority of businesses are run by culinary (78.4%), the rest are spread across fashion, agribusiness, automotive and other types of

businesses. The majority of businesses are relatively new because they are only between 1-5 years old (67.9%). Their business turnover tends to be stable, and some of them have gone up and down. Very few have experienced an increase or decrease in running their business. The majority of businesses have used the internet as a tool to run a business (69.8%). Social media is the most widely used internet media by micro and small entrepreneurs (64.2%) and very few use online shops, blogs and websites.

**Table 1: Descriptive Statistics**

Variable	label	Frequency	Percentage
Gender	Man	13	8
	Woman	149	92
Age (years)	20-30	50	30,9
	31-40	69	42.6
	41-50	34	21.0
	51-60	9	5.6
Education	SD	24	14.8
	SMP	40	24.7
	SMA	83	51.2
	Sarjana	15	9.3
Type of Business	Culinary	127	78.4
	Fashion	6	3.7
	Agribusiness	7	4.3
	Automotive	1	0.6
	Other	21	13
Business Age (years)	1-5	110	60.9
	6-10	38	23.5
	11-15	7	4.3
	16-20	3	1.9
	21-25	4	2.5
Business turnover	Stable	80	49.4
	It tends to go up	10	6.2
	Tendency down	18	11.1
	Ups and downs	54	33.3
Using the Internet for business	Not yet using	49	30.2
	Already using	113	69.8
Internet media used	Social media	104	64.2
	Online shop	5	3.1
	Blog	3	1.9
	Wbsite	1	0.6
	Not using	30	30.2

## Data Analysis

Before testing the hypothesis in the structural equation model, the accuracy of the measuring tool called the validity and reliability test, is carried out. Statement items to measure variables are designed using reflective models, which are measurement models that make items or indicators as the embodiment of latent constructs. To test the reflective measurement model, the following steps are required (Hair et al., 2020): (1) testing the loading factor as individual reliability, the loading factor score should be more than 0.708 and t statistically significant at 0.05, (2) the results of the loading factor measurement are referred to as indicator reliability, (3) calculating Cronbach alpha and composite reliability (CR) with a CR reliability limit of more than 0.7, (4) calculating the extracted variant average (AVE) to measure the convergent validity. The AVE score must be 0.5 or more, (5) test the validity of discrimination, namely by calculating the heterotrait-monotrait ratio of correlations (HTMT) (Henseler et al., 2015). The score is between 0.85-0.90. table 2 presents the constructs and statement items, loading factor, alpha Cronbach, CR and AVE. based on table 2 it can be seen that all indicators are declared reliable (more than 0.708 and also all reliable constructs because the scores of Alpha Cronbach and CR are more than 0.7. the convergent validity test using the AVE score shows that the items for each construct have high validity because the AVE score is more than 0.5.

**Table 2: Validity and Reliability Test**

Constructs & Items	Mean	SD	Factor loading	A	CR	AVE
Digital Technology Literacy				0.949	0.967	0.90
I know businesses can be run using social media, online stores, websites, online transactions.	5.5802	2.0723	0.884			8
I am willing to learn to use digital technology to support business activities.	5.4198	2.0053	0.947			6
I always try to learn about the development of digital technology for business interests	5.2222	2.0881	0.943			2
Digital Economy Literacy				0.917	0.947	0.85
I know electronic payments	5.3395	2.0404	0.946			7
I understand the use of digital finance in supporting business activities.	5.1728	2.0779	0.938			2

I have experience using digital financial technology such as OVO, DANA, GOPAY, QRIS, etc.	5.1667	2.1619	0.892			
		2				
Perceived Easy of use				0.915	0.947	0.85
I find it easy to use social media for product marketing activities	5.3519	2.0230	0.931			6
		7				
I find it easy to create digital marketing content for a running business.	5.0432	2.1303	0.948			
		7				
I find it easy to place ads on social media and the internet.	5.0123	2.0969	0.946			
		9				
Perceived of Usefulness				0.936	0.959	0.88
I consider it essential to use social media for business and marketing activities	5.2469	2.0310	0.944			7
		1				
Digital marketing content can increase consumer buying interest	5.2160	2.0207	0.946			
		6				
Advertising on social media and the internet in general is essential to increase sales	5.3642	1.9102	0.953			
		7				
Intention to Use				0.943	0.963	0.89
To support business activities, I intend to use social media.	5.2840	1.9543	0.953			7
		5				
Shortly I will be using digital marketing content	5.1235	2.0085	0.936			
		7				
I will soon be advertising social media and the internet	5.1235	1.9711	0.969			
		1				
Business Sustainability				0.959	0.966	0.77
In the production process, only a tiny amount of waste is produced	4.8704	2.1063	0.772			8
		0				
Waste from the production process is well managed	5.2037	1.9437	0.895			
		4				
Production waste management follows government regulations regarding waste	5.0309	1.9382	0.885			
		5				
The business I run helps provide employment	5.2099	1.8730	0.891			
		9				
The business I run has seen an increase in sales every year	5.0864	1.8927	0.881			
		6				
The business I run is generating the expected profits	5.1852	1.9117	0.904			
		9				
The business I run can meet the needs of my family	5.0864	1.9541	0.912			
		2				

With the business I run, I get recognition and appreciation from the community	5.0556	1.9663	0.908
		3	

**Tabel 3 Heterotrait-Monotrait Ratio (HTMT)**

	THAT	Of the	DTL	PEOU	LOUSE	BS
THAT						
Of the	0.918					
DTL	0.900	0.926				
PEOU	0.991	0.917	0.899			
LOUSE	0.952	0.895	0.938	0.959		
BS	0.908	0.832	0.859	0.860	0.872	

Based on the HTMT score in table 3, it can be seen that in general the items for each construct has the validity of discrimination.

### **Model Fit**

Before testing the hypothesis, it must first be sure that the structural model is the right model to explain the relationship between the variables being studied. There are several tests for model fit, the first is standardized root mean square residual (SRMR). An SRMR score of less than 0.1 or 0.8 (more conservative) indicates that the model is declared suitable (Henseler et al., 2014). Second, use D\_ULS and UG values as measures to assess the overall fit of the model. The empirical correlation matrix must be non-significant ( $P > 0.05$ ) to state that the model fits as a whole. Third, use the normed fit index (NFI) value. An NFI value of more than 0.9 indicates a fit model (Henseler et al., 2014). The closer to the number 1 the model will fit. Table 4 presents the information of the Fit model. Of the five measurement models, there were three measurements that were declared fit and two Chi-square and NFI measurements that were declared not fit. However, based on three measures, the SEM PLS model is declared fit to explain the relationship between the variables studied.

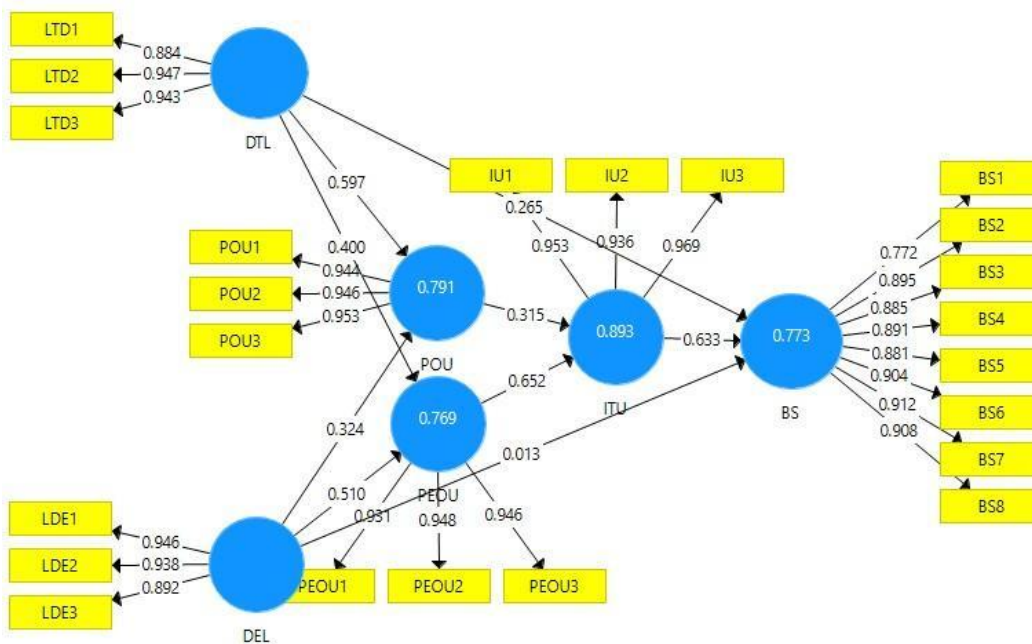


**Table 4: Model Fit**

	<b>Saturated Model</b>	<b>Fitness</b>	<b>Estimated Model</b>	<b>Fitness</b>
<b>SRMR</b>	0.046	Fit	0.056	Fit
<b>d_ULS</b>	0.587	Fit	0.862	Fit
<b>d_G</b>	1.277	Fit	1.445	Fit
<b>Chi-Square</b>	1074.762	Not fit	1112.414	Not Fit
<b>NFI</b>	0.810	Not Fit	0.803	Not fit

**Structural Equation Model**

Based on the model fit test, it is concluded that the model is generally declared a suitable model to explain the relationship between variables. Figure 2 explains the model of the relationship between latent variables, namely first, the effect of DTL on PEOU is 0.400, the effect of DTL on POU is 0.597, and the effect of DTL on BS is 0.265. The effect of DEL on PEOU was 0.510, the effect of DEL on POU was 0.324 and the effect of DEL on BS was 0.013. Furthermore, the influence of PEOU on ITU is 0.652, the influence of POU on ITU is 0.315 and the influence of ITU on BS is 0.633. The determination coefficient (R<sup>2</sup>) of DTL and DEL against PEOU was 0.769, the determination coefficient of DTL and DEL against POU was 0.791. The determination coefficient of PEOU and POU against ITU is 0.893 and the determination coefficient of DTL, DEL and ITU against BS is 0.773.



**Figure 2: Structural Equation Model**

### Hypothesis Testing: Direct Influence

The proposed research hypothesis is nine hypotheses, which are tested using the P-value (sig) test criterion with an alpha error degree of 5%. If the P-value is less than 0.05, then H0 is rejected and H1 (the research hypothesis is accepted. Based on table 5, the first hypothesis is that there is a significant influence of digital technology literacy on PEOU is accepted because it is rejected because the P-value is  $0.007 < 0.05$ . Furthermore, based on the test criteria, the second, third, fourth, fifth, sixth, seventh, and ninth hypotheses were accepted. Therefore, it can be stated that there is a significant influence of digital technology literacy on perceived of usefulness, on the significant influence of digital economic literacy on perceived Ease of use, there is a significant influence of digital economic literacy on perceived of usefulness, there is a significant influence of perceived easy of use on intention to use, there is a significant influence of perceived of usefulness on intention to use, There is a significant influence of digital technology literacy on business sustainability, and there is a significant influence of intention to use on business sustainability. While the eighth hypothesis is declared insignificant because the P-value is  $0.898 > 0.05$ , and therefore H0 is accepted. This means that digital economic literacy does not have a significant impact on business sustainability.

**Table 5: Path coefficients and Significance levels**

	Path coefficient	Sample Mean	SD	T-statistics	P-Values	Result
DTL -> PEOU	0.400	0.399	0.149	2.695	0.007	support
DTL -> FOR	0.597	0.600	0.119	5.024	0.000	support
DEL -> PEOU	0.510	0.512	0.143	3.556	0.000	support
DEL -> FOR	0.324	0.322	0.112	2.901	0.004	support
PEOU > IT	0.652	0.648	0.107	6.062	0.000	support
POU > THAT	0.315	0.319	0.109	2.875	0.004	support
DTL -> BS	0.265	0.270	0.130	2.041	0.042	support
FROM -> BS	0.013	0.006	0.104	0.128	0.898	Not support
THE -> BS	0.633	0.634	0.120	5.250	0.000	support

### Indirect Influence

In this study, because the model studied consists of four structures, namely  $PEOU = f(DTL, DEL)$ ;  $POU = f(DTL, DEL)$ ;  $ITU = f(PEOU, POU)$ ;  $BS = f(PEOU, POU, ITU)$ , then the indirect influence of DTL and DEL on ITU and BS through PEOU and POU can be known. In addition, it can also be calculated that the indirect influence of PEOU and POU on BS through ITU. Table 6 presents the indirect influence that occurs among the research variables:

**Table 6: Indirect Influence**

	Path coefficient	Sample Mean	SD	T-Stat	P-Values	Result
DEL -> PEOU -> ITU -> BS	0.210	0.212	0.085	2.459	0.014	support
PEOU -> IT-> BS	0.412	0.410	0.102	4.050	0.000	support

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DTL -> PEOU -> IT -> BS	0.165	0.162	0.071	2.323	0.021	support
DEL -> POU -> ITU -> BS	0.064	0.066	0.038	1.674	0.095*	Not support
POU -> ITU -> BS	0.199	0.202	0.083	2.383	0.018	support
DTL -> POU -> ITU -> BS	0.119	0.120	0.055	2.156	0.032	support
DEL -> PEOU -> ITU	0.332	0.334	0.115	2.880	0.004	support
DTL -> PEOU -> IT	0.261	0.256	0.103	2.538	0.011	support
DEL -> POU -> THAT	0.102	0.104	0.055	1.862	0.063*	Not support
DTL -> FOR -> ITU	0.188	0.190	0.074	2.554	0.011	support

\*significant at alpha 0.1.

From table 6, it can be stated that the variables PEOU, POU and ITU play a significant role as mediating variables of the influence of DTL on BS. Likewise, ITU plays a significant role as a mediating variable of the influence of PEOU and POU on BS.

## DISCUSSION

After testing, the first hypothesis was accepted and it means that there is a significant influence of digital technology literacy on perceived Ease of use. This means that the higher the ability of micro and small players in the field of digital technology, the easier it will be for them to use digital technology to help their business. The second hypothesis is also accepted which states that digital technology literacy has a significant effect on the perceived of usefulness. This means that the higher the literacy level of micro and small business actors, they feel that digital technology is useful in helping to run their business, especially in marketing activities, increasing sales and advertising. The results of this study support the research (Ritz et al., 2019) which states that the economic benefits of using the internet in the form of promotional activities for products and services can save expenses. The study also supports the findings (Ziółkowska, 2021) which states that IT technology and digital tools appear in marketing activities and help build relationships with clients and create value for both parties.

The third hypothesis test resulted in the conclusion that digital economic literacy has a significant effect on perceived Ease of use. This means that the higher the level of digital economic literacy of micro and small business actors, the more they feel the Ease of implementing the digital economy in their business. The third hypothesis test also concluded that the higher the digital economic literacy, the more micro and small business actors feel the benefits of using the digital economy in their business activities. The benefits felt from the ability in the digital economy are in the form of electronic payments and marketing of products and services. The results of this study corroborate the findings of (Fauzi & Sheng, 2022) that micro and small business actors are willing to use digital applications, especially in terms of delivery and payment. This research is also in line with the research (Odoom & Kosiba, 2020) that micro and small business actors feel the usefulness of mobile money in helping their business activities.

The fifth hypothesis test shows that when micro and small business actors feel the convenience of using digital technology and the digital economy, they will have a stronger intention to use the technology. The results of the sixth hypothesis test also produced a conclusion stating that when business actors feel the benefits of digital technology and the digital economy, the stronger the intention to use digital technology and the digital economy in their business activities. From the results of the research, the majority of micro and small business actors (69.8%) have used digital technology and the digital economy in running their businesses. The results of this study corroborate the findings (B. Setiawan et al., 2023) that the Ease of use and feeling the usefulness of fintech has a significant effect on the intention to adopt fintech among Indonesia women. The results of this study also support the findings (Crittenden et al., 2019) which concluded that the intention of women micro and small entrepreneurs in deciding to use ICT is influenced by their perception of the convenience and usefulness of ICT. The results of this study are also in line with the research (Camilleri & Falzon, 2021) which states that feeling the usefulness of technology increases the intention to use technology.

The seventh hypothesis test concluded that there is a significant influence of digital technology literacy on business sustainability. This means that the higher the level of digital technology literacy of micro and small business actors, the more sustainable the business will be. Business actors who have the ability and expertise in digital technology

will be able to improve their business sustainability, both economic, social and environmental sustainability. The results of this study are relevant to the view that digital technology can improve economic, environmental and social sustainability (Grybauskas et al., 2022; Szalkowski & Johansen, 2024). Although some studies reveal that digital technology is meant to increase productivity and efficiency, which has the main goal of increasing profits for business owners. As for social benefits in the form of job availability, for example, it is an element of accident and not a goal (Grybauskas et al., 2022).

The eighth hypothesis test resulted in the conclusion that digital economic literacy has no effect on business sustainability. In this case, electronic payments, and more broadly regarding the use of digital finance, and the use of digital wallets have no effect on business continuity from economic, environmental and social aspects. The results of this study are contrary to the results of the research (Bai et al., 2021) which states that digitalization is able to encourage economic, social and environmental sustainability. The results of this study are also contrary to the results of the study (Chatterjee et al., 2021) who found that the adoption of social media marketing plays a role in improving business sustainability. The difference between the results of this research and previous research can be caused by the measurement of the digital economy only in the aspects of digital transactions and digital finance. A broader measurement is needed on the aspects of using digital technology for marketing activities.

The ninth hypothesis test resulted in the conclusion that the intention to use digital technology and the digital economy as a tool to run a business plays a role in improving business sustainability. The stronger the intention of micro and small business actors to use digital technology, the higher the business sustainability will be. The acceptance of micro and small businesses in digital technology will increase the sustainability of their business. This research is relevant to the research (Li et al., 2020) that digital technology has implications for economic and environmental sustainability. In this context, companies create and present information on products and services produced using digital technology, and this effort will encourage consumers to make purchases, so that economically it will be sustainable. As the pressure for environmental responsibility increases, companies can adopt advanced technologies such as artificial intelligence (AI),

machine learning (ML), predictive analytics, and the internet of things (IoT) to achieve environmental sustainability goals (Ávila-Gutiérrez et al., 2020). This study also corroborates the findings (Nasiri et al., 2022) that digital orientation is able to improve economic, social and environmental sustainability.

## **CONCLUSION**

Business sustainability is a major trend in the world economy, in which there are micro and small-scale businesses that dominate the population of business units. Improving business sustainability in micro and small businesses is an effort that must continue to be carried out through various ways. In this study, it has been found that efforts to improve business sustainability can be carried out by increasing the literacy of micro and small business actors in the field of digital technology and digital economy. Business actors also feel that digital technology and the digital economy are something that is easy to use and also useful in helping to encourage stronger intentions to use digital technology and the digital economy. In fact, most of the micro and small business actors have used digital technology in the form of the use of social media as a tool to promote their products and services. They have also used the digital economy in the form of using the internet to conduct business transactions both for payments and for the sale of products and services. Another finding is that digital technology plays a role in improving business sustainability. On the other hand, digital economic literacy does not play a role in improving business sustainability. The last finding is the intention to adopt digital technology to be able to improve business sustainability.

## **LIMITATION**

The first limitation of the study is that the sample composition is not proportional, because it is dominated by respondents from culinary business actors. Other business fields have very few respondents. The composition of the sample is dominated by culinary business actors, which is rather risky to generalize to all micro and small businesses. Second, the measurement of the new digital economy is in the aspect of digital financial transactions and does not measure the digital economy from the aspect of digital

marketing. The impact is that the conclusion regarding the digital economy is incomplete and less comprehensive. Therefore, for further research, in order to make the conclusion more comprehensive, the composition of the sample is more proportional so that it can be more representative of the population. In addition, digital economic literacy needs to be measured from the aspect of digital marketing in order to produce a more comprehensive and accurate picture.

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